UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,805	03/23/2004	Masato Mizuhara	04970/0201060-US0	2912
7278 DARBY & DA	7590 05/15/2007 ARBY P.C.	EXAMINER		
P. O. BOX 5257			FENSTERMACHER, DAVID MORGAN	
NEW YORK, NY 10150-5257			ART UNIT	PAPER NUMBER
		·	3682	
			MAIL DATE	DELIVERY MODE
			05/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/806,805	MIZUHARA ET AL.	
Office Action Summary	Examiner	Art Unit	
	David M. Fenstermacher	3682	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on 23 M.      2a)□ This action is FINAL. 2b)⊠ This      3)□ Since this application is in condition for allowar closed in accordance with the practice under E.	action is non-final. nce except for formal matters, pr		
Disposition of Claims			
4)  Claim(s) 1-4 is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-4 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or			
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on 23 March 2004 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	a)⊠ accepted or b)⊡ objected t drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ot	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	tion No ed in this National Stage	
Attachment(s)		•	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date 3/23/04, 5/3/05; 4/25/05	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	Date	

Application/Control Number: 10/806,805

Art Unit: 3682

## **DETAILED ACTION**

### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The IDS's, filed 3/23/04, 5/3/05, have been considered in full.

### **Drawings**

3. The drawings, as originally filed, are acceptable as formal.

## Claim Rejections - 35 USC § 112

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with language which is vague and indefinite. The claims must be reviewed in their entirety. For example:

Claim 1, line 2, "holes" is indefinite since it is not clear how a ball can circulate in a hole.

Claim 1, line 4, "via" renders the claim indefinite since it is not clear how balls circulate via outside a ball nut.

Claim 1, line 4, it is not clear what is "bored".

Page 3

Application/Control Number: 10/806,805

Art Unit: 3682

Claim 1, lines 9-13, this language is indefinite since it is not clear where the step is formed, how it becomes a ball screw track between holes. Also, it is not clear what "both or one portions" are referring to.

Claims 2 and 3 are indefinite in their entirety.

Claim 4 is indefinite similar to claim 1.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al. (6,454,042).

Yoshida et al shows a power steering device where a screw (21) and nut (22) have balls (23) circulating endlessly in paths, each path is independent of another and the paths each have a recirculating piece (24) which passes the balls back to the beginning of the circuit; the depth of the recirculating piece must be deeper than the groove to allow the balls to pass over the ridge between the grooves.

#### Conclusion

7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with

Application/Control Number: 10/806,805

Art Unit: 3682

all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

# **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

P.O. Box 1450 Alexandria, VA 22313-1450
on (Date)
Typed or printed name of person signing this certificate:
Signature:
Registration Number:
Certificate of Transmission
I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. ( ) on (Date)
Typed or printed name of person signing this certificate:
Signature:
Registration Number:

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Application/Control Number: 10/806,805

Art Unit: 3682

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Fenstermacher whose telephone number is 571-272-7102. The examiner can normally be reached on 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M. Fenstermacher

Primary Examiner Art Unit 3682